Notice of Determination
ARAP General Permits

Regarding the Issuance or Reissuance of Tennessee General Aquatic Resource Alteration Permits

April 7, 2015

This notice presents the final determination of the Tennessee Department of Environment and Conservation, Division of Water Resources, and responds to comments on the proposed General Permits for §401 Water Quality Certifications and Aquatic Resource Alteration Permits.

I. Background

Under *The Tennessee Water Quality Act of 1977,* where the Commissioner finds that a category of activities or discharges would be appropriately regulated under a general permit, the Commissioner may use a general permit to authorize alterations to waters for specific categories of activities that are substantially similar in nature and that result in no more than an insignificant or *de-minimis* degradation of water quality.

Notice of coverage by the division of activities that qualify under general permits also serve as a §401 Water Quality Certification pursuant to the federal Clean Water Act.

Each general permit establishes notification procedures required for approval of a specific qualifying activity. Notice of Coverage by the Division of activities that qualify under general permits may also serve as a §401 water quality certification pursuant to *The Clean Water Act.*

The valid duration of a permit under the *Tennessee Water Quality Act of 1977* is five years. The Department must therefore re-issue or deny the general permits every five years. The existing general permits were issued July 1, 2010 and will expire on June 30, 2015. The 2015 draft general permits were advertised for public comments on December 5, 2015. A public hearing was held on January 13, 2015 in Nashville with simultaneous videoconference hearings at seven environmental field offices across the state. The commenting period ended on February 13, 2015. A total of 13 general permits were proposed for re-issuance and subject to public comments.

II. Comments and Responses

The public's concerns and questions, along with the division's responses are supplied in this section. These comments were gathered through the course of public hearings, both verbal and written, along with submittal of written comments through mail, e-mail and fax.

Comment: Tennessee's Aquatic Resource Alteration Permit ("ARAP") program was formally adopted in 2000 to establish general permits for a more streamlined process. This program, though, should not override the fact that, in circumstances where a permit for water withdrawal is required, TDEC is responsible for establishing permit conditions that protect the stream's resource value, such as flow levels below which no withdrawal can occur. The issuance of an individual ARAP requires that public notice of the approved activity be distributed to interested persons in addition to being "circulated within the geographical area of the proposed activity." Specifically, the permit applicant must distribute public notice "to the neighboring landowners by publishing in a local newspaper of general circulation and by posting a sign within view of a public road in the vicinity of the proposed project site as specified by [TDEC]." This public notice and potential participation does not happen with general permits, such that their wide or regular use should be viewed with caution. In addition, general permit programs may lead to potentially unavoidable cumulative impacts to waters of the state. Individual projects might not cause significant impact, yet the issuance of many such permits could result in degrading, cumulative effects. Finally, for activities that fall within the purview of the general ARAP program, the associated regulatory review is likely to be cursory in comparison with the review afforded an individual permit.

Response: TDEC utilizes general permits to authorize suites of activities that are substantially similar in nature and whose impacts to water resources are considered *de minimis*. These general permits are issued once every five years after a formal comment period that includes public notification to as broad population of stakeholders as feasible, and a public hearing simulcast across the eight regional field offices. The limitations and special conditions of each general permit prohibit activities that cause more than *de minimis* degradation to water quality. This includes cumulative impacts within a common plan of development. The division uses mapping tools and statewide databases, as part of the review process to evaluate all activities within the CPD from the past and into the reasonably foreseeable future. For more information on the division's policy, please see Appendix A.

Comment: TDEC should consider a plan that would allow MS4s to administer the ARAP permits within their jurisdiction.

Comment: It is important that the MS4 programs are involved in the ARAP permits. Our experience has shown that prior to our MS4 program there was very little awareness or compliance with ARAP permits. Without MS4 involvement and assistance we have found that activities for the most part occur without permits because of the difficulty for private landowners to understand the application process.

Response: The division believes that MS4s are an important stakeholder concerning development and natural resources within their jurisdictions. At this time the division thinks the more effective role MS4s may have is one that broadens and strengthens coordination efforts with the state concerning alteration permitting and local ordinances and policy. However, the

need for statewide consistency in implementation of the ARAP program may not be possible with over 90 different MS4 programs administering these permits. The division is currently developing a framework that highlights where state and local authorities may coordinate on projects requesting ARAP coverage and hope that this coordination process provides further protection for the water resources by the state and the local community.

Comment: In West Tennessee, as a result of "Extensive Channel Alteration" or "Dramatic Land Use Changes", aggressive channel evolution is a huge problem that contributes to poor water quality, degraded of aquatic resources, and dysfunctional stream function. To facilitate our efforts to "save" higher quality streams upstream of "head cuts" and of preventing huge volumes of sediment from entering streams and rivers, a General Permit for "Channel Stabilization in highly Altered Watersheds" should be developed. Appropriate use of weirs and grade control structures effectively mitigate aggressive channel evolution in West Tennessee. The designs are based off of standards established in NRCS Technical Guidance and Department of Agriculture Best Management Practices. When these structures are installed in Wet Weather Conveyances, the WWC GP is utilized for these activities. However, The WTRBA and NRCS routinely utilize grade control structure to arrest active "head cuts" in streams. A general permit for "Channel Stabilization in Highly Altered Watersheds" would facilitate accomplishment of WTRBA, NRCS, Department of Agriculture and TDEC objectives related to water quality and stream improvements. Similar to the proposed General Permit for "Restoration of Stream/Floodplain Dynamics and Wetland Enhancement", this GP could be geographically limited and have specific requirements regarding Data Collection/Science Objectives and approved Design/Construction Techniques. We understand that this GP would take some time to create and would not be issued in January 2015.

Response: The division recognizes that many areas of West Tennessee have stream instability issues due to historic poor management practices. We are currently evaluating the potential conditions and framework for a grade stabilization general permit that focuses on destabilized channels in areas where the dominant soils are loess and coastal plains soil.

Comment: any references to impaired streams in the general permits should cite DWR's general assessment process, not specifically the 303(d) List. In other words, "impaired streams" rather than "303(d) Listed streams."

Response: The division agrees and will make the appropriate changes.

Comment: The proposed general permits under the ARAP program have provided several additional conditions that are not currently included. Specifically, the following conditions have been added to all or several general permits:

- "This permit does not authorize impacts to cultural, historic or archaeological features or sites."
- "This permit does not authorize access to private property. Arrangements concerning the use of private property shall be made with the landowner."
- "Where applicable, all activities shall be accomplished in the dry. All surface water flowing towards this work shall be diverted using cofferdams and/or berms constructed of sandbags, clean rock (containing no fines or soil), steel sheeting, or other non-erodible, non-toxic material. All such diversion materials shall be removed upon completion of the work."
- "The use of monofilament-type erosion control netting or blanket is prohibited."
- "Stream beds shall not be used as linear transportation routes for construction equipment, rather, the stream channel may be crossed perpendicularly with equipment provided no additional fill or excavation is necessary."
- "Widening of the stream channel as a result of this activity is prohibited."

We commend the efforts of TDEC to include these conditions, and we find them to be positive additions to the ARAP program that should continue to strengthen the protections of our state's waters. These conditions, however, are not applied to all general permits, and we believe it would be beneficial for these conditions to be more broadly applied to all permits within the ARAP program.

Response: The division agrees with the need for consistent application of general conditions to every general permit, except where the conditions are not applicable to a specific activity. We will ensure that all general permits have these conditions unless these conditions are not applicable to the specific activity being authorized.

Comment: The reissued ARAP program includes one "General Condition" regarding state- or federally-listed endangered and threatened species. The comment is proposed as follows:

- "Activities occurring in known or likely habitat of state or federally listed threatened, endangered, or a species deemed in need of management may not be authorized without prior consultation with the Tennessee Wildlife Resources Agency (TWRA) and TDEC Division of Natural Areas (DNA) to determine if the proposed activities will or will not likely result in take, harassment, or destruction of the species or render the habitat unsuitable. Adverse effects to federal threatened and endangered species are not permitted without prior authorization from the United States Fish and Wildlife Service (USFWS) as required by Section 7 or Section 10 under the Endangered Species Act."

This newly proposed condition appears to replace two conditions that appear in the current ARAP general permits. Those two conditions state the following:

- "Activities that may result in an adverse effect to a threatened or endangered species, or to designated critical habitat; or is likely to jeopardize the continued existence of a species proposed for listing as endangered or threatened without prior authorization from the U.S. Fish and Wildlife Service as required by section 7 or section 10 of the Endangered Species Act where applicable are not covered. Adverse effects comprise, but are not necessarily limited to, the following: (a) death or injury to one or more individuals that results from activities associated with an action, (b) a change in habitat quantity or quality that results from activities associated with an action that renders the habitat unsuitable for the species, or (c) activities associated with an action that disrupts normal behavior or functions of individuals."

- "Activities that may result in the take, harassment, or destruction of plant or wildlife listed as threatened or endangered or a species is deemed to be in need of management, as defined and identified under Tennessee Code Annotated (TCA) 70-08-103, Tennessee Wildlife Resources Agency (TWRA) Proclamations 00-14 and 00-15, and Division of Natural Heritage (DNH) Rule 0400-6-2 or which will destroy the habitat of such species without prior authorization from TWRA and/or DNH where applicable are not covered."

We have concerns with TDEC's newly proposed language replacing the two current conditions for potential impacts to protected species. The need for condensing these two conditions and generalizing the requirements is not clear. Specifically, we are most concerned with the newly proposed language that states an activity cannot occur in an area where it is "known or likely" to be habitat of a species. The interpretation of this language has legal implications that could leave unknown habitat and species vulnerable, particularly for species of state concern that are not otherwise federally protected. For example, a developer could argue ignorance in support of a decision to proceed with a project without the proper consultations with TWRA or DNH. We believe these revisions are unnecessary, and we encourage TDEC to leave the current language in these general conditions unchanged.

Response: The newly composed condition for species protection was written in coordination with the Tennessee Wildlife Resources Agency. It affords the maximum amount of protection allowed under state law. Further, the review process evaluates every project proposal to determine the potential impact activities may have on endangered species. In addition, there is

regular coordination with state agencies and the Division of Natural Areas on projects where no known occurrences are but the potential for these sensitive species exists. This provides a consistent and thorough statewide evaluation process for protection where there is potential habitat and/or species presence. This process, to the best of our abilities, ensures the protection of these state and federally listed species.

Comment: The following general condition is included: "Activities, either individually or cumulatively, that may result in greater than *de minimis* degradation of waters of the state are not covered. This general permit shall not be used incrementally to combine with other activities resulting in a net loss of water resource values."

The public notice informs that, "In accordance with the Tennessee Anti-degradation Statement (Rule 0400-40-03-.06), the division has determined that activities conducted under these general permits will not result in more than *de minimis* degradation to water quality." Neither the public notice nor most of the draft general ARAPs at issue require additional considerations when the activities are in an Exceptional Tennessee Water or high quality surface waters. *See* Tenn. Comp. R. & Regs. 0400-40-03-.06(4). *But see* Tenn. Comp. R. & Regs. 0400-40-03-.06(1)(d)(3). Neither the Anti-degradation Statement nor the definition of "*de minimis degradation*" (Rule 0400-40-03-.04(4)) contain a blanket exception for general permits. The purpose of the Anti-degradation Statement is to protect existing uses of surface waters, and because the division is effectively issuing prospective permits for unknown projects, the division should exercise heightened caution and narrowly craft the permit terms.

The citizens of the State of Tennessee are entitled to a science-based regulatory program that protects our watersheds from the headwaters to the tap. As mentioned in the joint comments submitted to TDEC by the Tennessee Clean Water Network in November 2014 on the Chapter 0400-40-03 Rulemaking, the *de minimis* exception to anti-degradation review is of concern, because the antidegradation rule is based on the fundamental goal of the Clean Water Act to eliminate the discharge of pollutants to our nation's waters by 1985. There is nothing in the text or structure of the Clean Water Act or EPA's implementing regulations supporting an approach that presumptively allows activities that cause degradation. Therefore, we respectfully suggest that the issue before the division is not just whether a particular permittee's projects have a cumulative impact but whether the particular project, in conjunction with other activities in the watershed, is having a cumulative impact and degrading the state's waters. This would include watershed impacts from non-permitted activities, as well as permitted activities.

Response: We appreciate the commenters' statements and hope to assuage concerns that the division does not evaluate the cumulative nature of these activities throughout the entire stream when making determinations concerning level of potential impact. The division, to the best of its abilities, has determined that the suite of activities authorized under conditions and limitations found in the general permits constitutes a *de minimis* level of impact. In addition, as the commenter notes, each permit has language that specifically states that the permits may not be used incrementally to result in a cumulative level of impact that exceeds *de minimis*.

The terms and conditions contained within these permits has been carefully crafted and refined to provide a maximum amount of protection for our water resources while providing the maximum

amount of flexibility for our permittees so that growth and development may continue. The division's responsibility through its consistent and vigilant oversight of the administration of the ARAP program as a whole, and these general permits in particular, is to ensure that the cumulative nature of these singular permitted activities have no more than a *de minimis* impact to water quality.

Comment: For all general ARAPs, please include the following language under "General Conditions" where not included:

a. Replace "The activity may not be conducted in a manner that would permanently disrupt the movement of fish and aquatic life" with "The activity may not be conducted in a manner that would result in the long-term disruption of the movement of fish and aquatic life." Measuring permanent disruption is not feasible and any activity permitted under a general ARAP should not disturb aquatic life for more than the time of project activity.

b. Include Exceptional Tennessee Waters along with the National Wild and Scenic River System and Outstanding National Resources Waters as not covered by general ARAPs.

c. Waterbodies with contaminated sediments or impaired by heavy metals must be ineligible for any general ARAP coverage. The potential to create more of a pollution problem in these waterbodies should be avoided.

d. The prohibition on disturbing threatened or endangered species must specify its application to both wildlife and plant species, as it does in current general ARAPs.

Response:

a. The division agrees that the interpretation of the word permanent may be ambiguous. We have clarified the language to read: "The project may not result in a disruption or barrier to the movement of fish or other aquatic life".

b. The division disagrees with this suggestion. The Antidegradation Statement within the Water Quality Criteria rules state "In the case of habitat alterations, if the department determines that no degradation or only de minimis degradation will occur, no further review under the rule is required regardless of the antidegradation classification of the receiving stream." Therefore, activities (within a project) may be authorized if the impacts within that project, either individually and/or cumulatively, falls within the limits of the general permit.

c. The division believes for most of the activities covered by general permits, the conditions requiring adequate BMP and erosion control measures, among others, are sufficient to prevent more than a *de minimis* impact from any mobilized sediment, including contaminated sediment. The general permits that directly authorize dredging of sediments already contain a provision prohibiting their use in streams where contaminated sediments may be mobilized.

d. The division agrees with the comments. The conditions within the general permit cover all plants and animals that are state and federally considered threatened, endangered, and species deemed in-need-of-management.

Comment: Please clarify TDEC's intent. We recommend that multiple impacts covered by a specific GARAP should not apply cumulatively to other types of permits covering different types of impacts. Cases in which it is apparent that permit applicants are attempting to circumvent the individual permit process should be handled by TDEC on a case-by-case basis.

Response: TDEC does evaluate each applicant's proposed activity on a case-by-case basis. Cumulative impacts, whether the same activity or a different activity, can cause adverse effects in the watershed where the activities are taking place. If any activity within the Common Plan of Development exceeds the threshold of de minimis degradation, all activity within that CPD is subject to a standard permit. This ensures that no net loss of resources is authorized without proper avoidance, minimization, and/or compensatory mitigation. Please see Appendix A for additional information on Common Plan of Development.

Comment: It is our experience that when native species are required, a cover crop must be also allowed, because the clumping and slow-growing characteristics of many native species make it difficult to achieve timely soil stabilization and their exclusive use will cause or contribute to soil loss and sedimentation.

Response: TDEC agrees with the comments. The division will change the condition to allow for the temporary establishment of non-native, non-invasive annuals as cover crops until native species are established.

Comment: We agree with restoring the preexisting types of riparian vegetation to pre-construction conditions. In urban and other populated areas, the use of true native vegetation in riparian restoration is likely to have a negative impact on the aesthetics and stabilization of existing species planted for lawns and landscaping. We request that TDEC provide their written rationale regarding the use of native grasses and other vegetation for restoration and stabilization of stream and riparian areas.

Response: The benefits of native vegetation along stream corridors have been widely documented, as summarized in the division's TN Erosion Prevention and Sediment Control handbook, and is considered the preferred BMP for stabilization in the division's NPDES Construction Stormwater General Permit. In addition, the establishment of nonnative or invasive vegetation tends to provides less than optimal habitat and structural integrity and therefore represents resource loss, as compared to a natural, native riparian zone. The Division's antidegradation policy requires permitted alterations be performed in the least ecologically impactful manner practicable, and we believe post-project re-establishment of a fully functional native riparian zone represents the least impactful alternative.

Comment: Also, is it TDEC's intent that tree, shrub, and grass species be as specified in the Landscaping with Natives at tneppc.org? If so, we will have to develop a new species list to utilize in riparian areas.

Response: The division has outlined in the TNEPSC handbook invasive plant species that historically were used to control erosion and are no longer a preferred option for EPSC measures. Please refer to the TNEPSC handbook, which is based on the Landscaping with Natives list, for further guidance on acceptable plant species for stabilization and post-construction revegetation.

Comment: The general condition language "activities that impair surface water flow into or out of any wetland areas are prohibited" is inconsistent with provisions of permits which allow wetland impacts. We suggest substituting "Activities that cause greater than de minimis adverse impacts to wetlands."

Response: The Division concurs that as worded, this provision is not applicable to all general permits, as several may authorize alterations or temporary impacts to wetlands. This language will be revised for these types of general permits, such as the minor wetland alteration general permit.

Comment: We recommend substituting the word "contact" for "consultation" because, especially for the USFWS, the word "consultation" has a very specific meaning indicating elevated agency requirements.

Response: We understand that the definition of consultation in relation to endangered species has a very specific meaning for 401/404 actions. We agree to change the sentence to reflect the efforts that take place on a statewide level to ensure protection of state or federally listed threatened, endangered, or a species deemed in need of management. We propose to change the word "consultation" to "coordination".

Comment: For activities proposed in known or likely habitat of state or federally listed threatened, endangered, or a species deemed in need of management we recommend that USFWS be included as a contact.

Response: While the division is required to coordinate with state resource agencies and divisions, the U.S. Army Corps of Engineers through its 404 program is the lead agency for federal resource coordination with the USFWS. This general condition specifically states that adverse effects to federally listed species are not authorized, and the state is not required to wait for a federal action or opinion from USFWS before issuing a permit.

Comment: We recommend that the prohibition of monofilament-type erosion control netting not be included as such an all-encompassing requirement. Have TWRA or USFWS said this is a problem? Perhaps this statement could be used in relation to the presence of endangered species *per se*. It is the experience of our environmental field staff that monofilament is seen as a problem for wildlife on an infrequent basis and recommends that biodegradable or photodegradable monofilaments be allowed.

This would have an impact on use of slope blankets and other protective measures on projects. Our materials and testing personnel provided information regarding our erosion control netting

and blanket products and this requirement, if not modified, would negatively affect many areas that need a higher level of stabilization.

Response: Our agency partners at TWRA have expressed concern and requested the prohibition of these types of monofilament netting along riparian corridors due to the potential impact this netting has on wildlife. The TWRA states that all wildlife, not just endangered species, within riparian zones are at risk of entrapment when monofilament netting is used. In addition, there have been a vast number of published studies that document the detrimental impacts these types of erosion control blankets have on wildlife, especially to reptiles and amphibians, many of whom are aquatic or semi-aquatic species.. The division believes that, where 401 certification is required, avoidance of unnecessary wildlife harm through the exclusion of certain erosion control products is justified. Applicants may choose from many economically comparable alternative erosion control blanket and netting options that are commercially available today. The division has restricted the use of monofilament –type erosion control netting in individual permits for the past six years. Permittees have successfully used cost effective alternatives such as natural fiber woven blankets with no reduction in product performance. Reference papers

http://www.herpconbio.org/Volume_6/Issue_1/Kapfer_Paloski_2011.pdf

http://www.icoet.net/icoet_2009/downloads/proceedings/icoet09-proceedings-appendices-posterdisplays.pdf

Comment: We recommend this be 14 days, to be consistent with the NPDES CGP, wherever it occurs in the proposed ARAPs.

Response: TDEC agrees with the comment and will make the appropriate changes to be consistent with the NPDES CGP

Comment: Use of native species only is not compatible with current Group A, B, and C mixes specified in TDOT's 2015 Standard Specifications. We will have to develop an additional seed mix for areas near stream channels? As stated above, the slow establishment of the native grasses (species) would delay the final stabilization of a project (longer establishment time for appropriate cover) and is thus in opposition to established TDEC requirements for prompt stabilization. We recommend that TDEC define "in or near stream channel". Will this apply to all stream channel projects regardless of size or type of project, or location in populated areas?

Comment: We agree that a cover crop is needed for project stabilization and completion. We question whether native seed mixes improve water quality in streams, and thus qualify as a subject of General ARAPs, or is it regulatory preference? Especially in terms of reducing sedimentation of water resources, which is actually is considered a type of pollution by TDEC rules, quick stabilization is more important than native grasses. The lack of native vegetation *per se* is not a condition or cause of pollution, and is thus is considered to be misapplied in these permits.

Response: The removal of native riparian vegetation, or establishment of non-native or invasive species within the riparian zone is considered a degradation of habitat and a resource loss. However, the division recognizes the difficulties in native species establishment and has authorized the use of non-invasive annuals as a temporary cover crop until native species become established. As reflected in the NPDES Construction Stormwater General Permit, TDEC requires prompt stabilization on all sites regardless of the site proximity to water resources. Please refer to the standard specifications in the TN Erosion Prevention and Sediment Control Handbook for further details.

To reflect the use of temporary non-native cover crop, the division will change the condition to read:

1. Erosion prevention and sediment control measures must be in place and functional before any land disturbance activities begin, and shall be designed in accordance with the department's *Erosion and Sediment Control Handbook* (www.tn.gov/environment/wpc/sed_ero_controlhandbook/). Permanent vegetative stabilization of all disturbed areas in or near the stream channel (within the buffer zone) must be initiated within 14 days of project completion, and utilize native species (see also *Landscaping with Natives* at tneppc.org). Non-native, non-invasive annuals may be used as a temporary cover crop until native species are established.

Comment: In reference to temporary crossings, we are concerned that the phrase "in the construction area" would be difficult to consistently define and is far too open to interpretation.

We are concerned that not allowing fill to be used to construct temporary crossings will be detrimental to the environment, compared to equipment repeatedly driving across streams. We are concerned that this isn't feasible for construction, especially since many streams are too deep, or flow too swiftly, to safely drive across.

Response: TDEC will change the condition to read:

Stream beds shall not be used as linear transportation routes for construction equipment. Temporary stream crossings shall be limited to one point in the construction area and erosion control measures shall be utilized where the stream bank vegetation is disturbed. The crossing shall be constructed so that stream or wetland flow is not obstructed. Following construction, all materials used for the temporary crossing shall be removed and disturbed stream banks shall be restored and stabilized if needed.

Comment: Years ago, the department determined and made part of the state's Water Quality Standards that waters where we find fish and aquatic life would be fully protected watercourses. (There were actually three additional criteria, but the basis for most determinations was the presence of fish and aquatic life.) Other watercourses were termed "Wet Weather Conveyances" and only protected in the sense that they could not harm humans or wildlife that came in contact with them or convey pollutants that would be harmful downstream. They could be altered or eliminated entirely provided that appropriate erosion and sediment controls and pollution prevention measures would be used, as would be expected at any other construction site. More recently, Tennessee law has been amended to more fully define Wet Weather Conveyances and limit how alterations can be regulated. My concern is that some watercourses that may accurately be identified as "Wet Weather Conveyances" are also important parts of our aquatic systems. We know now better than we ever did before how small headwaters provide essential services such as trapping sediments, attenuating floods, filtering and processing organics and nutrients, and maintaining biodiversity. In any particular watershed, if enough small headwaters are trimmed away, water quality and aquatic biodiversity in the remaining streams will diminish. Particularly in our state, home to some of the richest and most diverse freshwater aquatic systems on the planet, we want to be sure we preserve these systems. I certainly don't propose that small headwaters can't be altered. What I do suggest is that watersheds can and should be sustainably managed to maintain ecological function at the scale of whole systems. That will require further work in developing functional assessment methodologies and some way to replace lost headwater function before that loss accumulates to an unsustainable level. That's really the only basis on which the Wet Weather Conveyance General Permit can be responsibly reissued.

Response: While the Division does not disagree with the body of science pertaining to the connectivity of headwater systems and their potential effect on downstream waters, and that it has a responsibility to maintain the quality of all waters of the State, we would note the commenter's correct statement that State law currently limits how alterations to Wet Weather Conveyances may be regulated. We believe that the wording of the general permit applies the full extent of regulation on these features allowable under statute. The division is currently developing a more refined functional assessment methodology applicable to all watercourses, and is committed to replacing lost headwater function resulting from permitted activities resulting in a greater than *de minimis* degradation through compensatory mitigation.

Comment: Add "activities authorized under the conditions of this permit are considered *de minimis*" language to the WWC permit.

Response: The Division concurs and has added this language.

Comment: In determining the jurisdictional status of a watercourse in Tennessee, TDEC makes a distinction between a "stream" and a "wet weather conveyance". According to the Tennessee Water Quality Control Act ("TWQCA"), a stream is defined as a surface water that is not a wet

weather conveyance. In contrast to a stream, the TWQCA defines a wet weather conveyance as a man-made or natural watercourse, including those natural watercourses that have been modified by channelization, which meets all four of the following characteristics: (A) that flow only in direct response to precipitation runoff in their immediate locality; (B) whose channels are at all times above the groundwater table; (C) that are not suitable for drinking water supplies; and (D) in which hydrological and biological analyses indicate that, under normal weather conditions, due to naturally occurring ephemeral or low flow there is not sufficient water to support fish, or multiple populations of obligate lotic aquatic organisms whose life cycle includes an aquatic phase of at least two (2) months. If a watercourse does not meet all four of these characteristics, the watercourse must be deemed a stream. Given that TDEC focuses on distinguishing between "streams" and "wet weather conveyances" when making jurisdictional determinations, the standard procedures for making hydrologic determinations focus on determining whether a watercourse satisfies the wet weather conveyance definition or not.

In Tennessee, watercourses that are considered streams include intermittent and perennial streams. TDEC defines a perennial stream as "a natural watercourse (including modified natural watercourse) whose stream beds during normal hydrologic years are always below the groundwater table." In contrast, TDEC defines an intermittent stream as a natural watercourse (including modified natural watercourse) whose stream beds remain above the groundwater table for a portion of the year. The definition established by TDEC acknowledges that intermittent streams constitute a broad class of streams which may or may not support aquatic life. Moreover, intermittent streams, according to TDEC, can include streams that flow continuous from 30 days during normal hydrologic years to those that flow 364 days during normal hydrologic years.
Revisions to the Wet Weather Conveyance general ARAP were driven by the new law adopted in the General Assembly with regard to alterations to wet weather conveyances. The new law attempts to establish a clear jurisdictional demarcation of wet weather conveyances, but limits any protections of these resources. TDEC's proposed revisions to the ARAP for wet weather conveyances appear to be consistent with this new law.

We are not comfortable with the ARAP providing general approval for all activities within a wet weather conveyance. Notably, without the requirement for any coordination or communication with TDEC for activities within a wet weather conveyance, TDEC, as the regulator, loses any regulatory oversight of that activity. This is of particular concern where, for example, a developer might be incorrectly classifying an intermittent or perennial stream as a wet weather conveyance.

RESPONSE: The Division believes that an adequate level of coordination and communication with the division for activities conducted within a wet weather conveyance does exist to exert a level of regulatory oversight over these activities. Given the detailed definitions of the various classes of water features the commenter accurately describes above, and the fact that the division has developed a thorough standard operating procedure and Rules designed to facilitate consistent identification and delineation, we believe we have provided adequate guidance to prevent the incorrect classification of these features. Moreover, all final determinations of these features must be made or concurred with by the division prior to any alterations taking place. This often occurs prior to, or as a part of, review for NPDES Construction Stormwater Permit issuance, or ARAP permitting of larger sites. In any case, alteration of a feature that does not

specifically meet the definition of a wet weather conveyance is not authorized under this permit, and may be subsequently subject to enforcement and/or remediation.

Comment: According to TWQCA, which reflects the enactment of Public Chapter No. 464, TDEC must establish standard procedures for making stream and wet weather conveyance determinations that consider biology, geology, geomorphology, precipitation, hydrology, and other scientifically based principles. Scientific studies now reveal how biological, hydrological, and chemical connections exist between most types of isolated or other waters of the state. Often times, wetlands and other waters are connected to streams and waterways by groundwater flows, intermittent streams, or overland flows. Because of this hydrologic connection, these waters, and specifically wetlands, can have significant effects on the chemical quality of downstream waters.
These hydrologic determinations must be conducted by a qualified hydrologic professional. Hence, TDEC has established a certification program for people who wish to become certified hydrology professionals known as the Tennessee Hydrologic Delineation Class. In order to be deemed a qualified hydrologic professional, a person must hold a bachelor's degree in biology, geology, ecology, engineering, or related sciences, must have a minimum of five years relevant experience, and must successfully complete the Tennessee Hydrologic Delineation Class.
The hydrologic determination report must include the required documentation outlined under Tenn. Comp. R. & Regs. 0400-40-17-.04(1). Requirements include: (1) an explanation of the purpose and context of the report, including any proposed alterations to wet weather conveyances, streams, wetlands, or other aquatic resources; (2) vicinity map with property boundaries or review area; and (3) submission of at least one completed Hydrologic Determination Field Data Sheet, which is based on various interdisciplinary sciences that underlie stream development, channel maintenance, and the relationship between hydrologic regime and stream ecology. Specifically, jurisdictional status of a watercourse is determined by evaluating 28 different attributes of a watercourse and assigning a numeric score to each of the 28 attributes.

In addition to stream determinations made by TDEC, Tennessee Department of Transportation ("TDOT") requires Design-Builders of Design-Build contracts to complete field data sheets for water resources. The Guidance is intended to provide Design-Builders with the procedures required by law, regulation, rule, policy, and standard in order to use Federal Aid and State Highway funds for transportation projections. If Design-Builders do not adhere to the procedures specified in the Guidance, federal and/or state funding is subject to being withdrawn from transportation projects. The Guidance specifies that the field data sheets for water resources are to be used to document streams, springs, seeps, ponds, quarries, lakes and wet weather conveyances. The Guidance provides a list of characteristics that should be referenced to assess whether a watercourse is a perennial stream, an intermittent stream, or a wet weather conveyance. The Guidance notes that it is important to obtain confirmation of a questionable stream or wet weather conveyance from TDEC and/or U.S. Army Corps of Engineers (USACE). For example, if a design-builder determines that a watercourse is a wet weather conveyance, but the watercourse is indicated as a blue line on a topographic graph (illustrating the watercourse as a stream), then the determination must be made by TDEC or USACE. The newly adopted law regarding wet weather conveyances addresses this issue by requiring that "a person desiring to alter a specific water of the state … request a determination from the commissioner that it is a wet weather conveyance."

To conform the ARAP for Alterations to wet weather conveyances to this law, we believe TDEC should include a notice requirement for any activities proposed under this ARAP. This may not need to be as extensive as a Notice of Intent nor need it require extensive TDEC review or response; however, the ARAP should be revised in accordance with this condition of the new adopted law to insure that any proposed activities utilizing this ARAP be verified.

Response: As alluded to in the previous response, the division concurs with the commenter's assertion that final determination that a specific water of the state is a wet weather conveyance is made by the commissioner (or their designee), and even determinations made by third-party qualified hydrological professionals must be submitted to the division for their concurrence. However, once that determination has been made, alterations to wet weather conveyances meeting the conditions of the general permit can be made without further notification or written authorization, per T.C.A. 69-3-108 (q) (1) "The alteration of a wet weather conveyance, as defined in § 69-3-103, by any activity is permitted by this subsection (q) and shall require no notice or approval; provided, that it is done in accordance with all of the following conditions".

Comment: Upon review, we noted that the provision for protection of listed species is omitted from this particular ARAP. Listed species are not merely associated with water features. Thus, an ephemeral stream or wet weather conveyance could include habitat for listed plant or animal species, and should be included.

Response: We have added a condition clarifying that the permit does not authorize adverse impact to listed species.

Comment: Straw bale check dams are not listed in the Tennessee Erosion & Sediment Control Handbook, and are no longer considered an appropriate BMP.

Response: We have removed reference to straw bale checkdams.

Comment: Condition #6: We recommend deleting this sentence : "Checkdams or other erosion control devices are not to be constructed in stream." from the Wet Weather Conveyance ARAP, because by TDEC's definition "in stream" does not include wet weather conveyances. If the intent is to now extend this prohibition to WWCs, water quality could be reduced because removing EPSC measures from WWCs would make sedimentation of receiving streams more likely.

Response: It is not the division's intent to prohibit checkdams or other erosion control devices within wet weather conveyances, and we have added language clarifying this provision applies to jurisdictional streams.

Comment: Condition#6 seems to be contradictory with other parts of the General Permit. We suggest deleting condition #6 and referencing recommended BMPs in #4 and #5.

Response: Condition#6 is referenced directly from state statute governing the regulation of wet weather conveyances, and has been clarified further per the comment above.

Comment: In the second paragraph a requirement should be added that the discharge or withdrawal authorization must first be obtained before an NOI is submitted to the Division. A general permit for this activity should not be issued until the applicant has permission to discharge to or withdrawal from the waterbody in order to prevent construction of a structure which ends up unused.

Response: The language in the second paragraph already explicitly states that obtaining coverage under this general permit does not authorize discharges into or withdrawals from the receiving stream. The condition that application for, and written authorization from the Division is required to obtain coverage under this GP, even for relatively small structures, allows the Division to adequately review the justification and potential need for the activity, including consultation with Division staff associated with NPDES, TSMP, CGP and withdrawal permitting. This should help prevent construction of "unused" structures, without setting up an excessive regulatory timeline requiring sequential application, review, and issuance for the multiple permits sometimes required for a single project.

In addition, the NPDES Construction Stormwater General Permit (CGP) already contains a provision requiring the submission of complete applications for any ARAP permits needed on a construction site before CGP coverage can be granted. The sizable majority of coverages under this permit are issued for stormwater outfalls, and the Division's experience is that this CGP provision works well to minimize excessive and unauthorized alterations to water resources.

Comment: It is our experience that the permit condition for the alignment of the outfall structure (except for diffusers) to be as parallel to the stream flow as is practicable, with the discharge pointed downstream, is difficult to achieve in situations where the natural flow is coming in a perpendicular direction toward the stream.

Response: The permit condition indicates the Division's expectation that every effort be made to align the outfall stream as parallel as possible to the natural stream flow, to protect channel stability. The condition's wording "as parallel … as is practicable" requires the applicant to evaluate alternative intake/outfall locations, or any other measures that may be taken to comply with this provision. If the intake/outfall structure cannot be installed parallel to the stream flow, supporting justification should be provided by the applicant and will be reviewed by the Division on a site-specific basis.

Comment: We recommend that TDEC clarify the length of allowable stream length (Special Condition #4), as follows : "Headwalls, bank stabilization materials, and any other hard armoring associated with the installation of each structure shall be limited to 25 feet along the receiving stream's bank" . We assume it is supposed to be 25 ft of stream bank of whatever stream the outfall structure is discharging to.

Response: The Division is in agreement with the recommendation to clarify this language, and will change Special Condition #4 to read : *"Headwalls, bank stabilization materials, and any other hard armoring associated with the installation of each structure shall be limited to a total of 25 feet along the receiving stream's bank".*

Comment: We recommend that outfall structures 25 feet or less measured along the bank of the receiving stream be made a non-notification General ARAP.

Response: While the Division acknowledges that 25 feet or less of physical channel disturbance for other types of alterations have been deemed permissible under a general permit without notification or written authorization (such as the *General ARAP for Minor Road Crossings*), we believe that the potential additional water quality considerations associated with the discharge or withdrawal of water through these structures are sufficient to justify the requirement for application review, site tracking, and written authorization by the Division.

Comment: Consider allowing access stairs or small-scale canoe accesses be done without notification.

Response: The Division concurs with this suggestion, made by more than one commenter, and has added a subcategory of activities that may be performed under the conditions of the general permit without notification or written authorization. These activities would include, as suggested, public or private access stairs or hand-carried watercraft access, with restrictions on installation techniques, materials, and scale of bank disturbance.

Comment: The Launching and Access GP needs to allow for public or private structures. The old and current draft permit language is also vague as to whether private boat ramps are intended to be covered.

Response: The Division original intention for this general permit was authorization of public launching ramps and other public access structures, and we have added clarifying language to better reflect this. However, we also partially agree with the commenter's initial suggestion, and therefore have made some private structures allowable under the "no notification" subcategory described in the previous response. For larger structures, the Division generally considers the construction of public structures to provide all citizens access to the State's Water Resources a public good, justifying the minor degradation and aesthetic intrusion upon these resources. Conversely, the division believes a more thorough review of the necessity and alternatives available to private landowners, including the opportunity for public comment on the proposal, is an adequate justification to limit activities over the no notification threshold to public structures only. Larger private access structures may be authorized through the standard (individual) permitting process on a case-by-case basis.

Comment: Why was the exclusion for construction in State Scenic Rivers removed ? It needs to be reinstated.

Response: The language excluding coverage under the general permit for structures along State Scenic Rivers was inadvertently left off as part of the revisions to the General Conditions common across all of the ARAP general permits. We have corrected this error.

Comment: In Special Condition #1, we recommends substitution of "length" for "width" of fill.

Response: The Division intends for the 20 foot limit to apply to the distance as measured along (parallel to) the stream bank, and believes the term "length" may be confused with the length a ramp may extend into the stream channel. We have added additional language to clarify this.

Comment: We recommend that using a length of 25 feet along the stream would be more consistent with the Minor Road Crossings ARAP. Instead of not allowing a length along the bank of more than 25 feet under the General ARAP, the permit should instead make up to a 25-

foot impact a non-notification permit, with General ARAP notification required for ramps wider than 25 feet up to perhaps 50 feet length along the bank before requiring an Individual Permit, at least for those constructed by a governmental agency. These ramps are frequently of minimal water quality impact, and those constructed by governmental agencies typically help provide or enhance a stream's classified use for recreation.

Response: The Division believes that 20 feet represents an adequate impact zone to accommodate most of the minor public access structures this general permit is intended to cover, and that projects requiring a larger scale of impact can be addressed through the standard (individual) permit process, including justification for the need for a 40 -50 foot wide launching ramp. The enhancement of the public's recreational use of waters provided by structures built by government agencies is already reflected in the coverage for public access structures this general permit provides for.

Comment: It is not appropriate to include endwalls in the calculation of extent of cumulative impact, unless they are U shaped endwalls.

Response: The cumulative impact a minor road crossing structure has on the water resource includes the endwalls, wingwalls, and other transition areas of the structure. These additional protection areas are a necessary component of the road crossing structure and are integral to a properly functioning culvert, box, pipe or bridge. These transitional parts of the structures function as retaining walls for stability of the roadbed, soil, and protection for the culvert. These structures do not provide any significant habitat nor are their impacts temporary. To protect their integrity, these areas are regularly repaired, replaced, or maintained with riprap, debris removal, and other maintenance activities. Therefore, the Division considers the inclusion of the endwall transition areas, which have no independent utility except as a part of the crossing structure, as justified when determining the cumulative length of impact a crossing has at a specific site.

Comment: We have agreed for a long time with the cumulative adding of stream crossing lengths along a single stream to reach a threshold of 200 feet. However, we are concerned that the 200-foot length threshold should apply to any stream crossing occurring in a Stream Catalog Unit. For cumulatively adding all crossing lengths in a Stream Catalog Unit, we recommend that the threshold should be far higher than 200 feet.

Response: Cumulative impacts are defined as the "impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions..." Rule 0400-40-07-.03(13). General ARAP Permits can authorize impacts that if incrementally implemented may have the potential to cumulatively result in a loss of resources. To avoid a loss of resources without off-setting mitigation, public notice, or appropriate review under the antidegradation Rule, the division has historically determined that a threshold length of less than 200 linear feet of culvert is singularly or cumulatively a de minimis impact. While the scale of water resource this de minimis threshold would be applied to was described with the arguably vague term "within a single stream" in the previous Minor Road Crossing general permit, in 2014 the Division more clearly defined the resource scale at which the cumulative effects of all impacts to habitat integrity would be evaluated in a clarification document entitled "Clarification on Cumulative Impact Assessment and Aquatic Resource Alteration Activities Associated with a Common Plan of Development" (attached as Appendix A). For reasons described in more detail in this document, the Division believes applying the mandate in Rule to evaluate the potential for the overall impacts from a project to result in net loss of water resource value is most appropriate at the Stream Catalog Unit scale.

Comment: We suggest that the Federal Government's criterion for road crossing impacts qualifying for a USACE Nationwide Permit is more appropriate - that for linear transportation

crossings, which are being created for the public good, each crossing should be considered a single and complete project in the General ARAP program.

Response: While the Division concurs that linear transportation projects are intended for the public good, this consideration is reflected in the Division's overall review of the proposal's socio-economic justification, and is required to authorize any impacts to water resources. The purpose of a project does not inform the degree, individually or cumulatively, of the resulting impacts or loss to the State's water resources, it simply justifies the authorization of those impacts necessary for that project. The division has elected to use the Federal Highways guidance for road projects that require environmental review as the defined area for the state's definition of linear projects considered a Common Plan of Development.

The Federal Highway Administration regulations outline three principles in 23 CFR 771.111(f) to be used to frame a road project:

- Connect logical termini and be of sufficient length to address environmental matters on a broad scope;
- Have independent utility or independent significance, i.e., be usable and be a reasonable expenditure even if no additional transportation improvements in the area are made; and
- Not restrict consideration of alternatives for other reasonably foreseeable transportation improvements.

Based on these principles, and the reasoning outlined in "Clarification on Cumulative Impact Assessment and Aquatic Resource Alteration Activities Associated with a Common Plan of Development" the Division believes it most appropriate to define the Common Plan of Development for linear projects as being from logical termini to logical termini, with the associated impact points addressed cumulatively if within the same Stream Catalog Unit.

Comment: We recommend that TDEC define the countersinking process. It is our understanding that this is where the riprap is forced into the streambed to the proper elevation. We recommend that an over-excavation option be available when the proper elevation cannot be obtained by countersinking. The effectiveness of filling rip-rap voids with suitable substrate is questionable, compared to natural sedimentation. The stream will naturally place sediment where it is needed over time. In contrast, on a short-term basis, a stream is likely to blow out the material between voids filled as part of the project, until stream equilibrium is reached over time.

Response: The Division agrees with the commenter's definition of countersinking. However the division does not agree with authorizing over-excavation within a general permit, as this process has the potential to disturb the stream equilibrium and promote a condition of destabilization. The Division requires filling the voids of riprap areas with finer material to reduce the risk of localized turbulence and subsequent plucking of or dislodging of larger materials and therefore creating the potential for destabilization of the entire riprap revetment. If the stream substrate is not suitable for countersinking, the dissipation of energy and grade control may not be needed because of near surface bedrock or other compacted bed material. Isolated, project-specific

situations where over-excavation is considered the only alternative can be addressed through the standard (individual) permitting process.

Comment: In reference to Special Condition #8 concerning the removal of a road crossing we question whether this length is included in the 200 foot threshold. We recommend that when a stream is restored by removing a road crossing, any riprap or other measures are needed for stability should not have to be mitigated for or used to require an Individual ARAP

Response: When authorization for the removal of a minor road crossing is proposed, and is performed per the permit conditions, this footage is generally not used in a calculation of cumulative impacts that would represent a net resource loss and therefore require mitigation. The distance would however, in conjunction with any other proposed alteration activities associated with the project, be used in a cumulative evaluation of the total length of stream disturbance within a Stream Catalog Unit. If this exceeds the *de minimis* threshold, this would generally require the overall project to obtain authorization under a standard (individual) permit. In addition, removal of crossings in areas where known threatened or endangered species are found, or in resources considered ONRWs and/or State Scenic Rivers may require coverage under an individual permit.

Comment: We recommend the "not covered" language concerning wetland impacts used in the 2010 ARAPs be retained instead of using the word "prohibited," which could be interpreted to mean it is not even allowed under an Individual Permit.

Response: The Division agrees with the commenter, and will change the word "prohibited" back to "not covered" in Special Condition #3, and General Condition #4.

Comment: In the Obtaining Permit Coverage section, we recommend changing "total width of disturbance to the stream channel" to "length of disturbance along the stream channel".

Response: The Division agrees with the proposed changes.

Comment: Item 1 in Special Conditions requires clarification. Does the 200 feet length limit apply per stream bank or combined?

Response: Special Conditions Item 1 allows up to 200 total linear feet of channel disturbance, individually or cumulatively, per Stream Catalog Unit. The 200 feet does not separately apply to each bank in terms of a cumulative calculation.

Comment: Item 2 in Special Conditions should include additional language explicitly stating this general ARAP cannot be used when the road crossing is a component of a larger project or activity covered under an individual permit (e.g. residential developments and mining).

Response: This is covered under the General Conditions, Item 2.

Comment: Prohibit application of this general permit to waters impaired for siltation or habitat alterations. Those applying to construct or remove road crossings on waters impaired for siltation or habitat alterations would have to seek individual permit coverage to ensure no further degradation results.

Response: This permit with its governing conditions is intended to only authorize impacts associated with minor road crossings which, individually or cumulatively, will represent no more than a *de minimis* level of additional degradation to water resources. This level of additional impact is allowable under the Department's Antidegradation Rule, even for waters currently impaired for siltation or habitat alteration. For applications that propose more than *de minimis* degradation an individual permit and full antidegradation review would be required.

Comment: GP should include a requirement to return any disturbed area to prerepair condition when feasible.

Response: This provision was present in the previous general permit, and the Division agrees the addition of this langauge is appropriate in the new general permit.

Comment: Please clarify in Special Condition 1 when the 48 period begins.

Response: The 48 hours was intended to begin from identification that an emergency condition exists. We have added language to clarify this.

Comment: Under Special Condition 1 could the term "Public Entity" be added to the "public highway or transportation department?"

Response: The noticed language in the new general permit was expanded from "chief administrative officer of the public highway or transportation department" to a broader list consisting of the "chief administrative officer of the utility, public works, public highway or transportation department". We believe this list, plus the inclusion of the "designee" language described below, adequately inclusive of personnel with administrative authority over the types of infrastructure designed to be covered under this permit.

Comment: Under Special Condition 1 could the term "or their designee" be added after "chief administrative officer."

Response: The Division concurs and had added language indicating that it is acceptable for chief administrative officers to delegate authority for obtaining coverage under this permit to subordinates.

Comment: The length limitation of 300' in Special Condition 3 should be eliminated in favor of the language in Special Condition 6. Since by nature an emergency is unpredictable in timing as well as breadth.

Response: General ARAP permits are intended to cover activities that could potentially represent only a *de minimis* level of impact to water resources. In situations where an imminent threat to public infrastructure posing immediate danger to public health, safety, or the environment exists, and requires a larger scale of repair, or more extensive alterations than the GP allows, the activity may be authorized by the Commissioner under the emergency permitting provisions already existing in Rule 1200-4-7-.04 (4)(4).

Comment: Due to the nature of the impact channel widening or realignment (prohibited in Special Condition 7) may be incidental to the required minimum necessary to make the

appropriate repair. Could this prohibition be removed or amended to reflect this eventuality? Could the word “Unnecessary” be added to the beginning of this sentence?

Response: The Division concurs that if incidental widening or realignment actions are specifically necessary to abate the immediate threat to public safety, they may be authorized under this permit, and has added such langauge. It should be noted that all repair activities must be limited to address the imminent threat, and if further work may be needed at later date to effect a more permenant solution, that work should be proposed and authorized through the standard ARAP permitting process.

Comment: The General Conditions section is not applicable to emergency situation as it would with other planned permit activities. This section should be stricken entirely.

Response: The General Conditions set base line parametrics on what the Division deems the minimium protections that should be considered on any activity within the waters of the state. However, the Division agrees that Condition 4 and Condition 6 should be modified to be more applicable to the activities intended to be covered by this permit.

Comment: A cumulative cap is necessary to ensure significant habitat is not impacted through several small dredging activities. The total dredge amount from different permittees should be capped for each stream segment.

Response: The Division concurs with the need to ensure that the cumulative impact from any type of alteration activity, including gravel removal, does not result in a loss of resource value or a condition of pollution. However, we believe that limitations and conditions built into this general permit, including an annual cap of only 50 cubic yards per farm or residence, will ensure that activities properly conducted under this permit will not result in a greater than *de minimis* impact. Additionally, General Conditions #2 and #14 specifically prohibit cumulative activities from exceeding a *de minimis* level of degradation or causing a violation of water quality standards. If situations such as this do arise, the Division has the regulatory authority to address them on a case-by-case basis.

Comment: Recommend retaining the 2010 language in the "activities covered" section to read that the allowable limit for sediment removal be 100 feet either above or below a structure.

Response: The proposed limititation in the new permit still allows for the removal of accumulated sediment and debris for 100 linear feet of stream length as was the original intent, but specifies this length be divided evenly along the channel 50 feet above and 50 feet below a structure. This was intended as a clarification of the previous general permit, which contained the imprecise provision that sediment removal *"for a distance greater than 100 feet up and down the stream from a culvert or bridge are not covered"*. However, the Division recognizes that maintenance to address accumulated bed material may be better served by allowing the 100 linear feet of cumulative stream work to be performed using any combination of linear footage from upstream or downstream of the affected structure, and has made changes in the permit language to reflect this.

Comment: Request TDEC clarify special condition 1 to specify whether length of culvert or pipe increase would include additional end of pipe stabilization.

Response: The activites covered by this permit as written in the first section allows for the placement of up to 25' of clean rock fill for stablization at up and downs stream sides of an existing structure. This fill would not be considered an increase in the length of the existing pipe or culvert, and therefore would not violate the Special Condition 1. Activities that structurally extend the full or partial encapsulation itself, such as additional wingwall extensions, would be prohibited and not considered maintenance activities. We have added the word "structure" to further clarify this.

Comment: Under "obtaining permit coverage" describe what TDEC means by rock fill placement.

Response: The fill is any type of clean, loose, natural material (clay, gravel, riprap) placed in a degraded bed or bank within 25' of a structure to correct erosion, headcut or undermining of the surrounding bed or bank parent material. It does not include other hard armoring techniques such as concrete or grouted riprap.

Comment: I would like to suggest that some thought be given to the definition for "low resource value wetlands" and "degraded wetlands". My concern goes to the fact that the very same definition used to define the wetland to be done away with via the permit, could also be used to define the larger adjacent wetlands. If the water resource value of the larger wetland is evaluated as degraded or low value, what would stop an applicant from digging a ditch that impacts .10 an acre or less of wetland and draining a 100 acre "low value wetland". I am sure some type of limiter can be written into the language here. Special condition one mentions "high resource value" and "rare wetland types", so I am sure there is a gradient here. However unless the overall impact of the permitted action that impacts the .10 or .25 cumulative, is limited to that area alone with no value judgment being made to adjacent wetland that might be drained by the act, you may create a permit for a lot of wholesale wetland drainage. I would offer this language as a possible limiter for the permit: ... "but only for wetlands that are degraded, of low resource value, or in situations where the proposed partial fill would result in no significant change in the water resources value of the larger wetland regardless of its' characterization."

Response: Low resource value will be defined as wetlands that score below a threshold defined by a Division-approved wetland assessment methodology such as the Tennessee Rapid Assessment Methodology (TRAM), or in some cases by the best professional judgment of Division staff. Currently a TRAM score of 40 and below is considered to represent low resource value, with a score of 41-75 representing moderate resource value. TRAM scores above 75 are considered high resource value and must also be assessed for Exceptional Tennessee Waters status.

Special condition #5 is designed to address the indirect impacts to a portion of a larger wetland, or wetlands and streams that are adjacent to the direct impact site. Given this and other similar comments, we have added some clarifying language to make the intent more clear. Also, the proposed general permit language in the Activities Covered by this Permit section stipulated that certain larger amounts of impacts "*may also be authorized, but only for wetlands that are degraded, of low resource value, or in situations where the proposed partial fill would result in no significant change in the water resource value of the wetland."* Here again we have reworded this section to better reflect the intent that the impact acreage of a wetland when determining a *de minimis* threshold appropriate for general permit coverage must be measured based on the overall acreage of degradation to the water resource value of the individual or larger wetlands, including reducing and extending the hydroperiod of a wetland to the point of net loss of resource value.

Comment: Does special condition 1 mean that an antidegradation/tier evaluation will have to be performed on each Minor Wetlands Alteration application? Will the EFOs be required to use TRAM to evaluate all wetlands that are proposed for alteration on a project to make sure they are not of high resource value or rare wetland type ? I understood that *de minimis* project such as those we authorize under GPs and would not have to be evaluated.

Response: Both the limitations described in Activities Covered by this Permit section, and Special Condition #1 will mean that in most situations the wetlands proposed to be altered will need to be evaluated for their current resource condition and antidegradation status before a General Permit can be issued. Special Condition 1 reflects the same basic concept as Condition 1 in the 2010 General Permit which stated "*Activities that impact wetlands that represent a high resource value as compared to others within the ecoregion are not covered*", and to further clarify Special Condition 1 we have additionally listed some examples of wetland types the Division has determined fits into this category. For all of the permit conditions and limitations related to condition or status, wetlands have been, and should continue to be, evaluated based on the Water Quality Standards and division approved assessment methodology such as best professional judgment with justification, or the use of Tennessee Rapid Assessment Methodology. The determination that the authorized activity will in fact only represent a *de minimis* resource loss is in most cases contingent on an evaluation of resource value.

Comment: I would suggest just limiting the permit to 0.10 acres total for each project. We have seen several projects that have had single wetlands slightly over 0.10 acres in size which require individual permits while other projects have had multiple wetlands less than 0.10 acres in size but cumulatively less than 0.25 acres that can get GP coverage. It has been hard to explain to the individual permit applicant why they need to mitigate for a project that result in less cumulative impacts to wetlands.

Response: The resource value of the wetlands, individually or cumulatively, informs what the acreage limit for *de minimis* degradation allowed under a general permit should be. This is to better adhere to the division's mandate for no net loss of water resource value. We have tried to reword the new language somewhat to provide better clarification that an applicant may fill 0.25 acres of wetland individually or cumulatively under a General Permit if the resource value is low, but is restricted to only 0.10 acres total when impacting moderate resource value.

Comment: In Special Condition #6, the top 12" of topsoil is to be stockpiled then spread at the end of the project. Do they need to replace it to the 12" original depth or is there any minimum depth needed?

Response: Special Condition #6 specifies that the pre-construction contours and elevation should be restored for temporary impacts. As a result of this condition when 12" of topsoil is removed, theoretically close to 12" of topsoil should be restored. The goal of this condition is to ensure any impact to the wetland hydrology, which is greatly affected by contour and elevation, is indeed temporary, and to restore the seed bed to the wetland.

Comment: We recommend that any acreage impact limits refer only to permanent alterations and requests removal of the term "temporary"

Response: The addition of temporary impacts to this general permit will allow stakeholders such as transportation infrastructure and utility companies to avoid the cost and time associated with procuring an individual permit for small temporary impacts below the defined thresholds thereby facilitating the permitting process when *de minimis* temporary impacts are involved.

Assurance that impacts to larger or unlimited areas of wetlands were indeed temporary and therefore de minimis in scale and/or temporally would necessitate monitoring conditions and success criteria inappropriate for a general permit.

Comment: We recommend that "cumulative alterations" only refer to permanent alterations and not include temporary alterations.

Response: See above response. Monitoring and success criteria needed to document that conditions were fully restored to pre-impact conditions would often need to be site-specific and therefore not appropriate in a general permit.

Comment: We request that TDEC explain what rationale initiated the proposed change in wording from the 2010 General ARAP, within the Activities Covered by this Permit section.

Response: The wording of this section in the 2015 wetland alteration general permit has been changed to clarify that temporary wetland alterations may also be covered, and has expanded the allowable amount of impact to include up to 0.25 acres of low resource value wetlands, individually or cumulatively and 0.10 acres of moderate resource value wetlands, individually or cumulatively. Impacts to water resource value is the focus of the protection of waters of the state. The language is being clarified in the permit to better define the limits of *de minimis* degradation allowable under a general permit, resolve any inconsistencies and confusion in the permit's application, and to prevent net loss of water resource value as required by law.

Comment: In reference to Special condition #5, We are concerned how TDEC will determine that hydrologic alteration to adjacent wetlands has occurred such that the method is scientific based and repeatable. We recommend that clarification be included in the permit or that the language is removed. Please clarify how to include impact acreage calculation.

Response: In an effort to clarify the intent and application of this provision, the Division has crafted more specific language centered around causing "measureable degradation to resource value and classified uses". Through the division's existing definitions of degradation, its Water Quality Standards, and assessment methodologies used to determine use support and resource value, we believe the division can accurately and consistently evaluate a water resource to determine if an activity has resulted in, or is likely to result in, impact beyond the authorized work footprint. Any necessary impact calculation would be based on the cumulative amount of additional resource degradation to adjacent water resources, in a manner analogous to any resource degradation evaluation made by the division through its ARAP program. .

Comment: In reference to Special condition #5, we recommend changing "impacted by" to "adversely affect the resource value and classified use.

Response: As part of more clear wording of this condition, we have changed "impacted by" to "cause measureable degradation to resource values and classified uses".

Comment: In reference to Special Condition #6 , change vegetation stabilization from 15 days to 14 days.

Response: The Division concurs with this change.

Comment: Prohibit application of this general permit to wetlands immediately adjacent to waters impaired for siltation or habitat alterations. Those applying to impact wetlands adjacent to waters impaired for siltation or habitat alterations would have to seek individual permit coverage to ensure no further degradation results.

Response: Special Condition #5 is intended to require any measurable degradation to an adjacent stream and wetland be included in the cumulative impact evaluation, which must remain below a *de minimis* threshold to be authorized by the general permit. This applies to all adjacent streams and wetlands, not just those impaired for siltation or habitat alteration. The Division has reworded this condition to clarify this intent.

Comment: Prohibit the use of this permit in a watershed (8-digit HUC) that has experienced a wetland loss of 50% or higher using the most reliable historical data. Assessed in the early 1990s, Tennessee has lost about half of its wetlands as a result of fills for development, agriculture, mining, and other activities. The continued loss of wetlands and their beneficial functions, even minor, threaten the integrity of an entire watershed.

Response: We agree with the concerns you address. The division is currently updating the department's Wetland Program Plan, as part of our continued efforts to protect and prevent wetland resource loss. We are focusing on improving monitoring and assessment, water quality standards, and regulatory requirements concerning wetland protection. As our current database and mapping capabilities become more robust, quantification of overall wetland loss may be more feasible. . There is currently no reliable quantitative real-time data on wetland loss by watershed. An historical and current wetland map would be needed for each watershed and the aerial boundaries can be difficult to define without ground-truthing.

Comment: Retain the language from the current permit to prohibit the use of this permit for wetlands that are adjacent to waters of the National Wild and Scenic River System, Outstanding National Resource Waters or Exceptional Tennessee Waters.

Response: The Division considers these designations to have been included within the category of wetlands with "high resource value", but will more explicitly include them under Special Condition #1.

Comment: Clarify the language to describe the allowed activity.

Response: The division has attempted to add clarifying language describing the types and scale of activities that may be authorized under this general permit in the Activities Covered by this Permit beginning section. Some of the Specific and General permit conditions that follow this section provide additional information as to where these activities may be restricted due to site-specific issues, such as the presence of Threatened or Endangered Species, or located in Outstanding National Resource Waters.

Comment: Add "or wetlands" after "flowing systems" in the final sentence of the first paragraph.

Response: The Division concurs with this comment and has added "*jurisdictional wetlands*" in addition to "*flowing systems*" to further clarify the limitations of the Minor Dredging and Filling General Permit. This general permit already included the language under general condition 6 which states "*Activities that directly impact wetlands or impair surface water flow into or out of any wetland areas are prohibited*" and under special condition 6 which states "*Material may not be placed in a location or manner so as to impair surface water flow into or out of any wetland area.*". TDEC agrees that adding wetlands to the Activities Covered by this Permit section will further clarify and reinforce these conditions.

Comment: A reservoir bank width cap should be included in this general ARAP.

Response: The Division concurs with this comment, and has included a disturbance limitation length of 200 linear feet of shoreline in Special Condition #1 to remain consistent with the accepted level of *de minimis* activity in other general permits.

Comment : Provide more clarification on what type of fill activities are intended to be authorized by this permit.

Response: The Division has added clarifying language to the "*Activities Covered by this Permit*" section to better describe applicable fill activities.

Comment: Remove general condition language that is not applicable to the permit to avoid confusion.

Response: The Division has removed the following general conditions that are not applicable to the activities covered under the General Permit for Dredging and Filling:

#10 "Backfill activities must be accomplished in a manner that stabilizes the streambed and banks to prevent erosion. All contours must be returned to pre-project conditions to the extent practicable and the completed activities may not disrupt or impound stream flow."

#11 "The use of monofilament-type erosion control netting or blanket is prohibited."

#15 "Erosion prevention and sediment control measures must be in place and functional before any earth moving operations begin, and shall be designed according to the department's Erosion and Sediment Control Handbook (www.tn.gov/environment/wpc/sed_ero_controlhandbook/). Permanent vegetative stabilization using native species of all disturbed areas in or near the stream channel must be initiated within 15 days of project completion (see also Landscaping with Natives at tneppc.org). Non-native, non-invasive annuals may be used as cover crops until native species can be established."

#17 “Temporary stream crossings shall be limited to one point in the construction area and erosion control measures shall be utilized where stream bank vegetation is disturbed. Stream beds shall not be used as linear transportation routes for construction equipment, rather, the stream channel may be crossed perpendicularly with equipment provided no additional fill or excavation is necessary.”

#3 The former general condition 3 which read: “Clearing, grubbing, and other disturbance to riparian vegetation shall be kept at the minimum necessary for slope construction and equipment operations. Unnecessary riparian vegetation removal, including trees, is prohibited. Native riparian vegetation must be reestablished after work is completed. Coverage under this permit does not serve to waive any local riparian buffer protection requirement, and permittees are responsible for obtaining any necessary local approval.” has been changed to Special Condition #7 and now reads “Clearing, grubbing, and other disturbance to riparian vegetation is prohibited. Coverage under this permit does not serve to waive any local riparian buffer protection requirement, and permittees are responsible for obtaining any necessary local approval.”

Comment: Sediment Removal and Stream Remediation: In Special Condition #1, the word "were" should be "where". Special Condition #3 paragraph font and alignment is not like 1 & 2.

Response: The Division concurs and will correct these minor typographical errors.

Comment: We believe TDEC should prohibit application of this general permit to waters impaired for habitat alterations. Those applying to correct for sediment discharges on waters impaired for habitat alterations would have to seek individual permit coverage to ensure no further degradation results.

Response: This permit with its governing conditions is intended to only authorize temporary impacts associated with the remediation of recent and inadvertent sediment releases which, individually or cumulatively, will represent no more than a *de minimis* level of additional degradation to water resources. This level of additional impact is allowable under the Department's Antidegradation Rule, even for waters currently impaired for habitat alteration. For remediation activities that would represent more than *de minimis* level of additional degradation an individual permit and full antidegradation review would be required.

Comment: Item 14 under General Conditions should explicitly state "The discharge of additional sediment is prohibited."

Response: The Division believes the addition of this language would be redundant, and notes that the explicit intent of the authorized activity must be to remove sediment. Any additional discharge of sediment would not be covered under the existing permit conditions.

Comment: We recommend that Special Condition 1 say for "sole" purpose of flood control. One could argue that a lot of sediment removal is done for flood control.

Response: The intent and use of the permit is defined under the Activities Covered by this Permit section. Over-excavation of sediment for flood abatement is not one of the activities covered, even if it coincides with an inadvertent release of sediment. The addition of "sole" to Special Condition #1 may imply that this permit could be used for flood control if paired with another purpose.

Comment: We are concerned that the way General Condition 6 is written it appears to require sediment removal from a wetland to require an individual permit, which is detrimental to the goal of this ARAP, which is to quickly remove sediment before it migrates or causes more than the initial harm. Please strike language in General condition 6.

Response: The Division's intent is not to require an individual permit for all sediment remediation activities that may occur in a wetland area, and will clarify this condition by

changing “directly impact” to “adversely affect” and adding “permanently” to impairment of surface flow.

Comment: We recommend that e-mail be an option for notification if there is no response from telephone. We question whether this is notification is intended to be to the Central Office or EFO. We recommend defining “notified” as verbal or e-mail communication. We recommend that TDEC specify when work can start and if it is commencing concurrent with application preparation?

Response: The Division concurs that email notification from the applicant is acceptable and will include this language, however, it should be noted that commencement of work may not begin until the applicant has been notified by the Division that the proposed activities are conditionally approved. Applicant may provide notification to the Division at either the Central or Field Office level. The Division concurs with the recommendation that conditional authorization to proceed may be communicated verbally or by email, and has added clarifying language. We will also add clarifying language indicating work may commence immediately after receiving the Division’s conditional approval, proceeding concurrently with the “preparation” of the NOC application (as outlined in Obtaining Permit Coverage - Step #2).

Comment: Regarding General Condition #5 - *Activities that directly impact wetland resource value, or impair surface water flow into or out of any wetland areas are prohibited.*"

Will drilling activities within any wetland now require an Individual Permit with regard to this revised language? Previous permit wording: *Activities that "adversely affect" wetlands are not covered*.

Response: It was not the Division's intent to eliminate use of this general permit in all wetlands, and we have changed the language back to "adversely affect". In addition, the draft wording "directly impact" may not have regulated indirect impacts that cause a net loss of water resource value, which is the Division's intent.

Comment: There should be a cap on the size of the "scientific measurement devices" placed in a waterbody to ensure the project does not result in significant impacts to stream banks or aquatic life.

Response : The Division believes that the level of potential impact for activities intended to be covered by this general permit are not necessarily directly correlated to the size of the device itself, but more closely aligned with the methodologies and BMPs related to their installation and removal. The specific and general conditions that must be followed are designed to be protective of the water resources, and "significant impacts to stream banks or aquatic life" are directly prohibited by General Conditions #1 and #14. We have also added a Special Condition that clarifies the maximum area of disturbance allowable, previously only alluded to in General Condition #1 provision that greater than de minimis degradation is not authorized.

Comment: The general permit should require the restoration of any in-stream, streambank, or wetland disturbance when equipment and devices are temporarily or permanently removed.

Response : Although aspects of this concept are covered in some of the General Conditions, especially condition #9, we have added more direct language to this effect as a Special Condition.

Comment:

What is the basis for limiting directional bores to 10 crossings, especially if these are not on the same stream? Limiting the number of directional bore crossings under the general permit (for a project that exceeds 10 crossings) may have the unintended consequence of causing the applicant to choose to do all the crossings via open cut trench because that method is less expensive and any incentive use open cut under general permit is lost.

Response: In the case of horizontal directional drilling techniques that follow the conditions and BMPs described in the permit, we agree with this comment and have removed the limit of 10 crossings. The intent of limiting the number of crossings is to define a threshold where the potential for a greater than de minimis impact may exist. After review, we conclude that if a horizontal directional drill is executed properly, then a larger number of crossings could be done and still cause no more than a de minims impact.

It is important to distinguish horizontal directional drilling from other forms of trenchless techniques such as jack and bore and auger boring. Both of these techniques require underground or pit entry points that would typically be located closer to the waterbody. These techniques have impacts more closely aligned with open cuts and therefore should be limited to five crossings under general permit.

Comment : For Special Condition #4, we recommend the language "per utility per stream" placed within the text, but otherwise question whether TDEC means 10 crossings per stream, stream "unit", utility, or project?

Response : See above response. Based upon comments, the division has removed the 10 crossing limit for horizontal directional drill techniques.

Comment: Providing as-built drawings will be difficult for the field office to maintain and file. Are as-builts provided to the plans review section? If so, then the field office could ask for a copy of those if a problem arises.

Response: The as-built drawings are required only for gravity sewer installations. The as-built requirement is to ensure the permit BMP conditions were followed, including the adequate installation of the trench plugs which are essential to avoid the creation of a preferential flow path and the subsequent interception and capture of ground and surface waters. As-builts are not currently provided to the division's plans review section, and therefore this requirement was placed into the ARAP permit.

Comment : We recommend that the requirement to submit as-built records for gravity sewer line installations be deleted. The value of as-built information to TDEC NRU is unclear, and this information does not enhance water quality. ARAPs already require that projects be built per the plans submitted with the permit application, so as-builts are unnecessary. The timing would also be problematic for large projects for which as-builts would not be prepared and filed until the entire project is completed.

TDOT does not require as-builts for any utility installation. A different unit of TDEC requires the utility to submit design plans for water and sewer as part of the TDEC requirement for utility approvals. They have the policing authority to require the utility as part of that design review and authorization to provide as-built plans if they so choose, so additional enforcement through an ARAP is considered unnecessary.

If TDOT is tasked with this, there are several repercussions. For example, what if the utility does not provide as-builts to us? TDOT has little or no leverage to require them after construction is complete. If the utility submits as-builts to TDOT that are incorrect, who is responsible? How would TDEC NRU propose to enforce this, given that a different unit has the authority under law?

Response : See above response which relate to some aspects of this comment. Additionally, the division believes the compliance assurance aspect of this requirement will result in the protection of water quality. Gravity sewer lines have been of particular concern due to the potential for very serious water quality impacts if not properly installed, therefore this narrow class of utility line projects has had this additional requirement added. Submission of as-built would not be required until 45 days after project completion, even for large projects. It is TDOT's, or any permit holder's responsibility to ensure their contractors adhere to all permit conditions, including the submission of correct as-builts. A contractor's refusal or submittal of incorrect as-builts is materially no different than a contractor's refusal or incorrectly following any of the other permit conditions, and TDOT should have the leverage to ensure all permit conditions are followed. Finally, the division's authority to enforce on violations of the terms and conditions of a permit is not delegated to any specific unit.

Comment: The separation of water and sewer lines should be addressed in the plans review process and not the ARAP permit process. We rarely do co-location, and utilities do not prefer that solution. But it needs to be an option where there is very limited property access to relocate utility facilities. In some circumstances, the real estate is extremely tight and the only solution is for the same trench installation of water and sewer. We do not see utility co-location as a stream or wetland water quality issue, but offers that a single trench is less environmentally intrusive than two separate trenches.

Response: We agree that the separation of water and sewer lines should be addressed in the plans review process as a matter of public health, and that this issue does not factor into the

water quality certification considerations that ARAP general permits are intended to address. Therefore the division will delete this provision.

Comment: Clay trench plugs in gravity sewer trenches are not needed in west Tennessee because the soils are silty clays and trench plugs are not needed. Please delete this requirement for west Tennessee as it is an unnecessary requirement adding additional costs for no benefit.

Response: The requirement for the installation of trench plugs is aimed at preventing the creation of a preferential flow path for water within the bedding and backfill of newly constructed trenches. Inflow and infiltration is a direct result of water following gravity sloped sewer trenches within the bedding and backfill. Gravel or shot rock bedding may be used for bedding or backfill in trenches even in West Tennessee, creating the potential for streamflow capture.

In addition, because of concerns for incomplete compaction around pipes, the division has determined that clay, or West Tennessee silty soils are not suitable materials to effectively plug a trench. Therefore, we have modified that condition to require the use of flowable fill instead for the installation of trench plugs.

Comments: We question the length of clay plugs to be installed and whether specific industry standards are to be used. The specifications for clay trench plug need to be further developed to include length, compaction rate, and elimination of gravel bedding within the plug area.

Response: TDEC agrees with the commenters' concerns over clay trench plug specifications, and as stated in the previous response, has determined that flowable fill trench plugs are more appropriate due in part to issues involved in compaction and bedding. Additionally, we have added language clarifying the length of the trench plugs should be at least ten feet.

Comment: The proposed limitation stated as "up to 3 crossings" is unnecessarily vague and could be easily misconstrued in the field. This language should be redrafted to clarify, for example, whether the three authorized crossings are limited to the entire length of the project, are inferring a single location, etc.

Response: The provision that allows up to three crossings with no notification applies only to horizontal directional drilling (hdd). This would generally equate to three bore holes in the case of hdd. Therefore to help clarify, we have added the term *boreholes* in parenthesis to read: "Up to 3 crossings (boreholes) utilizing horizontal directional drilling, provided…" The three crossing limit on activities that may be authorized under the no notification sub-category of the permit, as with all activities covered under any general permit, applies to the entire extent of a project (in this case, the entire length of the utility line installation). In most cases these crossings will involve different locations, but could theoretically be in close proximity to one another if different boreholes were utilized.

Comment : The condition "up to 5 crossings" is unclear and should include additional limitations. For example, limitations should be set on the permissible width of each crossing, preferably to establish a maximum width for each crossing with a cumulative limit disturbance to waters of the state.

Response: Activities covered by general permits are subject to various limitations and conditions that are designed to limit the scale and degree of impact to no greater than a de minimis level of degradation to water resources. For utility line crossings, the potential for water resource loss is based primarily on the cumulative number of crossing points and the installation techniques proposed, and not as much on the width of each crossing point. The division believes for projects using open-trenching, jack-and-bore, or auger boring an appropriate threshold for the potential to exceed de minimis degradation is 5 crossings. For more information on the rules and policy involved in de minimis evaluation, please see 'Clarification on Cumulative Impact Assessment and Aquatic Resource Alteration Activities Associated with a Common Plan of Development' included as Appendix A.

Comment : Why are projects using open trenching techniques limited to 5 crossings? Please provide further clarification.

Response: Please reference the above response.

Comment: Special Condition #11 states: "[T]he excavation and fill activities associated with utility line crossing may be accomplished within the water column." We are unclear what is inferred here by "within the water column." We suggest revising this language to better clarify the parameters of this condition.

Response: TDEC agrees to change the language to be clearer. The condition will now read "…may be accomplished within the flowing water."

Comment: Under Special Condition #12 for Maintenance, repair and rehabilitation of existing utility lines, the proposed new language omits the following prohibition: "Fill activities for the construction of equipment access roads are not authorized in wetlands."

Instead the proposed new language is revised to state: "[T]otal amount of excavation or fill within wetlands, including equipment access roads does not exceed 50 cubic yards."

Although the practical application of this newly revised condition limits all fill in wetlands to 50 cubic yards, we are concerned with the omission of any unauthorized access for construction equipment. The concern here is not only the temporarily fill of wetlands, but also the placement of equipment within a wetland due to the high risk for accidental spills of fuel and other hazardous materials. We strongly advise TDEC to reconsider this omission to better protect these wetland resources.

Response: TDEC agrees with that access roads should be temporary and should be restored after maintenance activities are concluded to better protect wetland resources. Therefore, we have added the term "temporary" in reference to construction access roads and have added a standard condition regarding post-project restoration of affected wetlands.

Comment: Prohibit application of this general permit for new utility line crossings to waters impaired for siltation or habitat alterations. Those applying to install utility line crossings on waters impaired for siltation or habitat alterations would have to seek individual permit coverage to ensure no further degradation results.

Response : The limitations and conditions built into this general permit, especially the prohibition of blasting near the streams and other BMPs designed to reduce the risk of streamflow capture, will ensure that activities properly conducted under this permit will not result in a greater than de minimis impact. Additionally, General Conditions #2 and #14 specifically prohibit cumulative activities from exceeding a de minimis level of degradation or causing a violation of water quality standards.

Comment: Special Condition Item 9 should read "…avoid permanent alteration or damage to the integrity of the stream channel or wetland."

Response: The division concurs that this condition was intended to also apply to wetlands and has added the suggested language.

Comment: The Special Conditions should address the requirement to restore the water resource to preimpact condition as much as feasible.

Response: General Condition #9 was intended to address this concern, but the applicable language "All contours must be returned to pre-project conditions to the extent practicable" was inadvertently left off of the draft permit. It has been corrected.

APPENDIX A

Clarification on Cumulative Impact Assessment and Aquatic Resource Alteration Activities Associated with a Common Plan of Development

TDEC has an overarching responsibility to ensure that impacts to waters of the state, as approved via permits issued, do not result in a net loss of water resource value. TDEC achieves this when impacts approved through permits are either de minimis, or compensatory mitigation is required to offset the loss of the resource value when the impacts are greater than de minimis. Persons who wish to conduct an activity that may impact a water of the state must first employ all efforts to avoid and minimize such impacts. If, after all avoidance, minimization, and full alternative analysis impacts to the waters are determined to be necessary, mitigation must be proposed to offset lost resource value.[1] Further, no activity can be authorized by the Commissioner unless the mitigation is sufficient to result in no overall net loss of resources.[2]

In making a decision on any permit application, the Commissioner "shall determine the lost resource value associated with a proposed impact and the resource value of any proposed mitigation"[3] including the following factors:

1. direct loss of stream length, waters, or wetland area due to the proposed activity;
2. direct loss of in-stream, waters, or wetlands habitat due to the proposed activity;
3. impairment of stream channel stability due to the proposed activity;
4. diminishment in species composition in any stream, wetland, or state waters due the proposed activity;
5. direct loss of stream canopy due to the proposed activity;
6. whether the proposed activity is reasonably likely to have cumulative or secondary impacts to the water resource

TDEC regulations require the Division to evaluate…" *whether the proposed activity is reasonably likely to have cumulative or secondary impacts to the water resource"* for linear and non-linear projects. The cumulative level of degradation of proposed impacts on water resources may exceed a de minimis level, even where each discreet impact point might be considered de minimis if only considered individually. Where a single impact of a given scale might only require coverage under a general permit, multiple impacts of the same scale may require coverage under an individual permit, due to the cumulative effects. Similarly, large linear and non-linear activities often encompass multiple impacts that may, collectively, result in a net loss of water resource value if compensatory mitigation is not utilized to offset or compensate for the impacts. Therefore, TDEC must review applications from larger linear and non-linear activities

[1] Rule 0400-40-03-.04(4)(b), Water Quality Criteria; 0400-40-07-.01(1), Aquatic Resource Alterations

[2] Rule 0400-40-07-.04(6)(c), Aquatic Resource Alterations

[3] Rule 0400-40-07-.04(6)(c), Aquatic Resource Alterations

that propose multiple impacts comprehensively at the outset of permitting to ensure that there is no net loss of resource value from individual or cumulative impacts.[4] These projects are considered Common Plans of Development (CPD).

For activities that are considered CPDs, understanding the totality of the impacts associated with the entire project at the outset of permitting is critical for Division to assess if the de minimis threshold will be exceeded and an individual permit, and potentially mitigation is needed. If the de minimis threshold will be exceeded and an individual permit is required, the applicant must propose adequate mitigation actions so that there is no net loss of state water resource values

To better address the issue of resource loss with cumulative impacts, the Division will:

1. Require applicants with large projects that have the potential for multiple impacts within the project boundaries to submit a comprehensive project plan (including future phases) with their application;

2. Require applicants to identify all aquatic resources, including wetlands, streams, and creeks within the boundaries of the CPD, and the locations, size and scope of all potential aquatic resource alterations to waters of the state; and

3. Require that multiple impacts within the same Stream Catalog Unit ("Waterbody") for a project are assessed cumulatively prior to permit issuance for any portion of the CPD.

With the comprehensive plan, the Division will be able to address impacts within a CPD and holistically review the site for the potential to exceed the threshold of de minimis degradation to water resources. The process will allow the Division to ensure no net loss to water resources for both linear and non-linear projects. Further, it will benefit the permit applicant by:

- allowing the applicant to receive coverage at once for all impacts requiring 401 certification; therefore, having one public notice process and one application review time;
- providing reasonable certainty concerning the potential compensatory mitigation needs for the entire site over the life of the project; and
- avoid piece-mealing of impacts under multiple general or individual permits that can create controversy and confusion, and potentially lead to uncompensated loss of the State's water resources.

The Division will assess cumulative impacts for linear and non-linear projects on the Waterbody scale. This is the same scale the Division utilizes in its bi-annual report to EPA evaluating the overall ecological health and use support of our water resources ("305b report"). Years of detailed evaluation of data collected at this scale highlights these systems' responsiveness to activities within the watershed that are reflected in the overall condition of that Waterbody. This is also the scale at which TDEC reports the impairment status of water resources to the EPA

[4] Rule 0400-40-03-.04(4)(b), Water Quality Criteria; 0400-40-07-.04(4)(b), Aquatic Resource Alterations

(such as in the 303d-list), and the level at which the availability or unavailability of additional degradation from pollutants or habitat alteration is assessed.

All impacts within the CPD project boundaries (linear and non-linear) will be covered under an individual permit if any impact, either singularly, or cumulatively within a single Waterbody, exceeds the threshold of de minimis degradation. The amount of compensatory mitigation needed to offset resource loss will be calculated independently for each affected Waterbody. If impacts exceed de minimis in one Waterbody but do not exceed this threshold in another Waterbody, those that do not exceed the threshold will not require additional mitigation. Mitigation will only be assessed to those activities and impact types that require compensation for resource loss as outlined in the Division's Mitigation Guidelines.

An applicant may seek multiple general permit coverage for a CPD if the comprehensive plan and resource impact evaluation shows the activities cumulatively will stay below the minimum threshold for an individual permit.

On linear projects, the Division will use the logical termini as defined by the Federal Highway Administration (for the purpose of environmental reviews) to determine the extent of the CPD. Logical termini for project development are defined as (1) rational end points for a transportation improvement, and (2) rational end points for a review of the environmental impacts. As with non-linear projects, cumulative impacts for a linear project (from logical termini to logical termini) will be assessed on a Waterbody ID scale. Many large scale linear projects will affect multiple Waterbodies within the project boundaries. Each Waterbody will be identified, assessed, and impacts will be calculated based on the cumulative impacts within that Waterbody.